The following is a listing to TI's approved by the TIPC during its March 4, 1996 Conference Call.

TIR-200-96-001
Date Requested: 1/17/96
Initial Interpretation Date: 2/7/96
Current Draft Date: 2/27/96
Final TIPC Approval Date: (3/4/96)
Pertinent Document: NFRC 200-95
Referenced Sections: 5.4
Referenced Pages: 9-12

Question: Must the center-of-glass (Vt_c) and the total product (VT) visible transmittances be calculated and reported as part of an NFRC 200 simulation?

Proposal: Yes.

Vt_c is calculated and reported by the approved glazing system computational procedure in the process of computing Solar Heat Gain Coefficient. For simulators using WINDOW for area-weighting, VT is also calculated by WINDOW. For simulators using other methods for area-weighting, VT may be calculated from the following formula:

$$VT = [(Vt_f x A_f) + (Vt_d x A_d) + (Vt_e x A_e) + (Vt_{de} x A_{de}) + (Vt_c x A_c)]/A_{pf}$$

Where:
Vt_f=Frame visible transmittance
A_f=Frame Area
Vt_d=Divider visible transmittance
A_d=Divider Area
Vt_e=Edge-of-Glass visible transmittance
A_e=Edge-of-Glass Area
Vt_{de}=Divider Edge visible transmittance
A_{de}=Divider Edge Area
Vt_c=Center-of-Glass visible transmittance
A_c=Center-of-Glass Area
A_{pf}=Projected Fenestration Product Area

For opaque components (all known frames and dividers) the component visible transmittances

(Vt_f, Vt_d) are 0. Also note that Vt_c=Vt_e=Vt_{de}.

TIR-200-96-002
Date Requested: 1/17/96
Initial Interpretation Date: 2/7/96
Current Draft Date: 2/27/96
Final TIPC Approval Date: (3/4/96)
Pertinent Document: NFRC 200-95
Referenced Sections: 5.4
Referenced Pages: 9-12

Question: Must the values required for the specialty product procedure ($SHGC_0$, $SHGC_1$, VT_0, VT_1) be calculated and reported as part of an NFRC 200 simulation? ($SHGC_0$ is the total product SHGC for a fictitious glazing system where the center-of-glass $SHGC_c$ is 0. $SHGC_1$ is the total product SHGC for a fictitious glazing system where the center-of-glass SHGCc is 1. VT_0 is the total product VT for a fictitious glazing system where the center-of-glass VT_c is 0. VT_1 is the total product VT for a fictitious glazing system where the center-of-glass VT_c is 1.)

Proposal: Yes.

$SHGC_0$, $SHGC_1$, VT_0, and VT_1 must be calculated and reported for applicable product sizes and divider conditions including no dividers, dividers less than 1″ wide and dividers greater than or equal 1″ wide as shown in the following table:

	No Dividers		Dividers < 1Ó		Dividers >/= 1Ó	
	Res.	Non Res.	Res.	Non Res.	Res.	Non Res.
$SHGC_0$	0.xx	0.xx	0.xx	0.xx	0.xx	0.xx
$SHGC_1$	0.xx	0.xx	0.xx	0.xx	0.xx	0.xx

VT_0	0.xx	0.xx	0.xx	0.xx	0.xx	0.xx
VT_1	0.xx	0.xx	0.xx	0.xx	0.xx	0.xx

TIR-200-96-003
Date Requested: 1/17/96
Initial Interpretation Date: 2/7/96
Current Draft Date: 2/27/96
Final TIPC Approval Date: (3/4/96)
Pertinent Document: NFRC 200-95
Referenced Sections: 6.1
Referenced Pages: 13-14

Question: Please clarify frame grouping in NFRC 200.

Proposal: Frame groupings may encompass all or part of a Product Line and may or may not, at the simulator's discretion, correspond to frame groups previously defined under NFRC 100. Frame groupings may include more than one 0.05 center-of-glass group.

TIR-200-96-004
Date Requested: 1/17/96
Initial Interpretation Date: 2/7/96
Current Draft Date: 2/27/96
Final TIPC Approval Date: (3/4/96)
Pertinent Document: NFRC 200-95
Referenced Sections: 6.1
Referenced Pages: 14

Question: When dividers are grouped, and a representative $SHGC_d$ determined, what divider-width (PDD) is then used for all dividers within the group?

Proposal: For all dividers less than 1.0″ in width (PDD<1″), the representative $SHGC_d$ shall be used with a divider width (PDD) of 0.75″. For all dividers greater than or equal to 1.0″ in width (PDD>=1″), the representative $SHGC_d$ shall be used with a divider width (PDD) of 1.50″.

All true divided lites, internal grilles, muntin bars, and other dividers may be grouped together for the purposes of calculating SHGC and VT.

TIR-200-96-005
Date Requested: 1/17/96
Initial Interpretation Date: 2/7/96
Current Draft Date: 2/27/96
Final TIPC Approval Date: (3/4/96)
Pertinent Document: NFRC 200-95
Referenced Sections: 4.3
Referenced Pages: 6

Question: Please clarify how NFRC standard glazing divider patterns are defined.

Proposal: Within each product line, the simulator may define an NFRC standard glazing divider pattern for that product line's model size. A glazing divider pattern which results in divider on-center dimensions closest to but not greater than 12" shall be used as the NFRC standard glazing divider pattern. This pattern shall then be used for all divider options.

If an NFRC standard glazing divider pattern is not defined, each specific divider pattern must be rated individually.

TIR-200-96-006
Date Requested: 1/17/96
Initial Interpretation Date: 2/7/96
Current Draft Date: 2/27/96
Final TIPC Approval Date: (3/4/96)
Pertinent Document: NFRC 200-95
Referenced Sections: 5.2
Referenced Pages: 8-9

Question: Do the U-factors used in the frame and divider SHGC calculations have to be based on frame profiles with nominal 1/8″ and 1/4″ glass for the residential and non-residential sizes respectively?

Proposal: No. Model Size glass-thicknesses (nominal 1/8″ for Residential and nominal 1/4″ for Non-Residential)only apply to $SHGC_c$ calculations.

TIR-200-96-007
Date Requested: 1/17/96
Initial Interpretation Date: 2/7/96
Current Draft Date: 2/27/96
Final TIPC Approval Date: (3/4/96)
Pertinent Document: NFRC 200-95
Referenced Sections: 4.3
Referenced Pages: 6

Question: Can all products in a product line be represented with a default gap width and gas-fill?

Proposal: Yes. Gap width and gas-fill are not factors in determining individual products under NFRC 200. However, in all cases, the gap width used shall be equal to or between the smallest and the largest gap width used by the manufacturer and the gas fill used shall be air.

TIR-200-96-008
Date Requested: 1/17/96
Initial Interpretation Date: 2/7/96
Current Draft Date: 2/27/96
Final TIPC Approval Date: (3/4/96)
Pertinent Document: NFRC 200-95
Referenced Sections: 5.4.1.
Referenced Pages: 9-11

Question: How are the nominal 1/8″ and 1/4″ glass thickness requirements applied to thin polyester film products (such as Heat MirrorTM).

Proposal: Model glass thicknesses do not apply to thin polyester films. The performance properties for these products, for their specific product thickness, is taken from the NFRC Optical Properties spectral database.